MTBN1

MTAEPEVRTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVWGVDVSGAGGNIGIGGAPQTGKSTLLQTMVMSAAATHSPRNVQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDKVNRVVAEMQAVMRQRETTFKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLIIDGWPGFVGEFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKIEFRLGDVNETQIDRITREIPANRPGRAVSMEKHHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEIPIGLRETDLT
PAHCHMHTNPHLLIFGAAKSGKTTIAHAIARAICARNSPQQVRFMLADYRSGLLDAVPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVVLLVDDWHM
IVGAAGGMPPMAPLAPLLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAFGSGAPTMFLS
GEKQEFPSSEFKVKRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2

MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSVTGLVPAGADEVSAQAATAFTSEGIQ
LLASNASAQDQLHRAGEAVQDVARTYSQIDDGAAGVFAE*

MTBN3

MLWHAMPPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTGGG
SDKALAAATPMVVWLQTASTQAKTRAMQATAQAAAYTQAMATTPSLPEIAANHITQAVLT
ATNFFGINTIPIALTEMDYFIRMWNQAALAMEVYQAETAVNTLFEKLEPMASILDPGASQ
STTNPIFGMPSPGSSTPVGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLFSQVGGTG
GGNPADEEAAQMGLLGTSPLSNHPLAGGSGPSAGAGLLRAESLPGAGGSLTRTPLMSQLI
EKPVAPSVMPAAAAGSSATGGAAPVGAGAMGQGAQSGGSTRPGLVAPAPLAQEREEDDED
DWDEEDDW*

MTBN4

MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVRFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5

MAADYDKLFRPHEGMEAPDDMAAQPFFDPSASFPPAPASANLPKPNGQTPPPTSDDLSER
FVSAPPPPPPPPPPPPPTPMPIAAGEPPSPEPAASKPPTPPMPIAGPEPAPPKPPTPPMP
IAGPEPAPPKPPTPPMPIAGPAPTPTESQLAPPRPPTPQTPTGAPQQPESPAPHVPSHGP
HQPRRTAPAPPWAKMPIGEPPPAPSRPSASPAEPPTRPAPQHSRRARRGHRYRTDTERNV
GKVATGPSIQARLRAEEASGAQLAPGTEPSPAPLGQPRSYLAPPTRPAPTEPPPSPSPQR
NSGRRAERRVHPDLAAQHAAAQPDSITAATTGGRRRKRAAPDLDATQKSLRPAAKGPKVK
KVKPQKPKATKPPKVVSQRGWRHWVHALTRINLGLSPDEKYELDLHARVRRNPRGSYQIA
VVGLKGGAGKTTLTAALGSTLAQVRADRILALDADPGAGNLADRVGRQSGATIADVLAEK
ELSHYNDIRAHTSVNAVNLEVLPAPEYSSAQRALSDADWHFIADPASRFYNLVLADCGAG
FFDPLTRGVLSTVSGVVVVASVSIDGAQQASVALDWLRNNGYQDLASRACVVINHIMPGE
PNVAVKDLVRHFEQQVQPGRVVVMPWDRHIAAGTEISLDLLDPIYKRKVLELAAALSDDF
ERAGRR*

FIG. 1A

MTBN6

LSAPAVAAGPTAAGATAARPATTRVTILTGRRMTDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFARPGSPPLKLDQSLDDAGVVDGSLLTLVSVSRTERYRPLV
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTAPVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGHLAECLLVTTYLLIATAAALAVPLPRGVNSLGAPQVAGAATA
VLFLTLMTRGGPRKRHELASFAVITAIAVIAAAAAFGYGYQDWVPAGGIAFGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAIIASVPASAVRLTER
SKLAKQLLIGYVTSGTLILAAGAIAVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLIIWYPHYAWLLLSVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAIIPMLLWITGVYDTVRNIRF*

MTBN7

MAEPLAVDPTGLSAAAAKLAGLVFPQPPAPIAVSGTDSVVAAINETMPSIESLVSDGLPG
VKAALTRTASNMNAAADVYAKTDQSLGTSLSQYAFGSSGEGLAGVASVGGQPSQATQLLS
TPVSQVTTQLGETAAELAPRVVATVPQLVQLAPHAVQMSQNASPIAQTISQTAQQAAQSA
QGGSGPMPAQLASAEKPATEQAEPVHEVTNDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTTL*

MTBN8

MSITRPTGSYARQMLDPGGWVEADEDTFYDRAQEYSQVLQRVTDVLDTCRQQKGHVFEGG
LWSGGAANAANGALGANINQLMTLQDYLATVITWHRHIAGLIEQAKSDIGNNVDGAQREI
DILENDPSLDADERHTAINSLVTATHGANVSLVAETAERVLESKNWKPPKNALEDLLQQK
SPPPPDVPTLVVPSPGTPGTPGTPITPGTPITPGTPITPIPGAPVTPITPTPGTPVTPVT
PGKPVTPVTPVKPGTPGEPTPITPVTPPVAPATPATPATPVTPAPAPHPQPAPAPAPSPG
PQPVTPATPGPSGPATPGTPGGEPAPHVKPAALAEQPGVPGQHAGGGTQSGPAHADESAA
SVTPAAASGVPGARAAAAAPSGTAVGAGARSSVGTAAASGAGSHAATGRAPVATSDKAAA
PSTRAASARTAPPARPPSTDHIDKPDRSESADDGTPVSMIPVSAARAARDAATAAASARQ
RGRGDALRLARRIAAALNASDNNAGDYGFFWITAVTTDGSIVVANSYGLAYIPDGMELPN
KVYLASADHAIPVDEIARCATYPVLAVQAWAAFHDMTLRAVIGTAEQLASSDPGVAKIVL
EPDDIPESGKMTGRSRLEVVDPSAAAQLADTTDQRLLDLLPPAPVDVNPPGDERHMLWFE
LMKPMTSTATGREAAHLRAFRAYAAHSQEIALHQAHTATDAAVQRVAVADWLYWQYVTGL
LDRALAAAC*

FIG. 1B

mtbn1

```
1    atgactgctg aaccggaagt acggacgctg cgcgaggttg tgctggacca
51   gctcggcact gctgaatcgc gtgcgtacaa gatgtggctg ccgccgttga
101  ccaatccggt cccgctcaac gagctcatcg cccgtgatcg gcgacaaccc
151  ctgcgatttg ccctggggat catggatgaa ccgcgccgcc atctacagga
201  tgtgtggggc gtagacgttt ccggggccgg cggcaacatc ggtattgggg
251  gcgcacctca aaccgggaag tcgacgctac tgcagacgat ggtgatgtcg
301  gccgccgcca cacactcacc gcgcaacgtt cagttctatt gcatcgacct
351  aggtggcggc gggctgatct atctcgaaaa ccttccacac gtcggtgggg
401  tagccaatcg gtccgagccc gacaaggtca accgggtggt cgcagagatg
451  caagccgtca tgcggcaacg ggaaaccacc ttcaaggaac accgagtggg
501  ctcgatcggg atgtaccggc agctgcgtga cgatccaagt caacccgttg
551  cgtccgatcc atacggcgac gtctttctga tcatcgacgg atggcccggt
601  tttgtcggcg agttccccga ccttgagggg caggttcaag atctggccgc
651  ccaggggctg gcgttcggcg tccacgtcat catctccacg ccacgctgga
701  cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
751  cggcttggtg acgtcaatga aacccagatc gaccggatta cccgcgagat
801  cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatctga
851  tgatcggcgt gcccaggttc gacggcgtgc acagcgccga taacctggtg
901  gaggcgatca ccgcgggggt gacgcagatc gcttcccagc acaccgaaca
951  ggcacctccg gtgcgggtcc tgccggagcg tatccacctg cacgaactcg
1001 acccgaaccc gccgggacca gagtccgact accgcactcg ctgggagatt
1051 ccgatcggct tgcgcgagac ggacctgacg ccggctcact gccacatgca
1101 cacgaacccg cacctactga tcttcggtgc ggccaaatcg ggcaagacga
1151 ccattgccca cgcgatcgcg cgcgccattt gtgcccgaaa cagtccccag
1201 caggtgcggt tcatgctcgc ggactaccgc tcgggcctgc tggacgcggt
1251 gccggacacc catctgctgg gcgccggcgc gatcaaccgc aacagcgcgt
1301 cgctagacga ggccgttcaa gcactggcgg tcaacctgaa gaagcggttg
1351 ccgccgaccg acctgacgac ggcgcagcta cgctcgcgtt cgtggtggag
1401 cggatttgac gtcgtgcttc tggtcgacga ttggcacatg atcgtgggtg
1451 ccgccggggg gatgccgccg atggcaccgc tggccccgtt attgccggcg
1501 gcggcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
1551 ttacaaggca accatggaca agttcgtcgg cgccgcattc gggtcgggcg
1601 ctccgacaat gttcctttcg ggcgagaagc aggaattccc atccagtgag
1651 ttcaaggtca agcggcgccc ccctggccag gcatttctcg tctcgccaga
1701 cggcaaagag gtcatccagg ccccctacat cgagcctcca gaagaagtgt
1751 tcgcagcacc cccaagcgcc ggttaa
```

mtbn2

```
1    atggaaaaaa tgtcacatga tccgatcgct gccgacattg gcacgcaagt
51   gagcgacaac gctctgcacg gcgtgacggc cggctcgacg gcgctgacgt
101  cggtgaccgg gctggttccc gcgggggccg atgaggtctc cgcccaagcg
151  gcgacggcgt tcacatcgga gggcatccaa ttgctggctt ccaatgcatc
201  ggcccaagac cagctccacc gtgcgggcga agcggtccag gacgtcgccc
251  gcacctattc gcaaatcgac gacggcgccg ccggcgtctt cgccgaatag
```

FIG. 2A

mtbn3

```
1    atgctgtggc acgcaatgcc accggagcta aataccgcac ggctgatggc
51   cggcgcgggt ccggctccaa tgcttgcggc ggccgcggga tggcagacgc
101  tttcggcggc tctggacgct caggccgtcg agttgaccgc gcgcctgaac
151  tctctgggag aagcctggac tggaggtggc agcgacaagg cgcttgcggc
201  tgcaacgccg atggtggtct ggctacaaac cgcgtcaaca caggccaaga
251  cccgtgcgat gcaggcgacg gcgcaagccg cggcatacac ccaggccatg
301  gccacgacgc cgtcgctgcc ggagatcgcc gccaaccaca tcacccaggc
351  cgtccttacg gccaccaact tcttcggtat caacacgatc ccgatcgcgt
401  tgaccgagat ggattatttc atccgtatgt ggaaccaggc agccctggca
451  atggaggtct accaggccga gaccgcggtt aacacgcttt tcgagaagct
501  cgagccgatg gcgtcgatcc ttgatcccgg cgcgagccag agcacgacga
551  acccgatctt cggaatgccc tcccctggca gctcaacacc ggttggccag
601  ttgccgccgg cggctaccca gaccctcggc caactgggtg agatgagcgg
651  cccgatgcag cagctgaccc agccgctgca gcaggtgacg tcgttgttca
701  gccaggtggg cggcaccggc ggcggcaacc cagccgacga ggaagccgcg
751  cagatgggcc tgctcggcac cagtccgctg tcgaaccatc cgctggctgg
801  tggatcaggc cccagcgcgg gcgcgggcct gctgcgcgcg gagtcgctac
851  ctggcgcagg tgggtcgttg acccgcacgc cgctgatgtc tcagctgatc
901  gaaaagccgg ttgccccctc ggtgatgccg gcggctgctg ccggatcgtc
951  ggcgacgggt ggcgccgctc cggtgggtgc gggagcgatg ggccagggtg
1001 cgcaatccgg cggctccacc aggccgggtc tggtcgcgcc ggcaccgctc
1051 gcgcaggagc gtgaagaaga cgacgaggac gactgggacg aagaggacga
1101 ctggtga
```

mtbn4

```
1    atggcagaga tgaagaccga tgccgctacc ctcgcgcagg aggcaggtaa
51   tttcgagcgg atctccggcg acctgaaaac ccagatcgac caggtggagt
101  cgacggcagg ttcgttgcag ggccagtggc gcggcgcggc ggggacggcc
151  gcccaggccg cggtggtgcg cttccaagaa gcagccaata agcagaagca
201  ggaactcgac gagatctcga cgaatattcg tcaggccggc gtccaatact
251  cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc
301  tga
```

mtbn5

```
1    atggcggccg actacgacaa gctcttccgg ccgcacgaag gtatggaagc
51   tccggacgat atggcagcgc agccgttctt cgaccccagt gcttcgtttc
101  cgccggcgcc cgcatcggca aacctaccga agcccaacgg ccagactccg
151  cccccgacgt ccgacgacct gtcggagcgg ttcgtgtcgg ccccgccgcc
201  gccacccccа ccccccacctc cgcctccgcc aactccgatg ccgatcgccg
251  caggagagcc gccctcgccg gaaccggccg catctaaacc acccacaccc
301  cccatgccca tcgccggacc cgaaccggcc ccacccaaac cacccacacc
351  ccccatgccc atcgccggac ccgaaccggc cccacccaaa ccacccacac
401  ctccgatgcc catcgccgga cctgcaccca ccccaaccga atcccagttg
```

FIG. 2B

```
451  gcgcccccca gaccaccgac accacaaacg ccaaccggag cgccgcagca
501  accggaatca ccggcgcccc acgtaccctc gcacgggcca catcaacccc
551  ggcgcaccgc accagcaccg ccctgggcaa agatgccaat cggcgaaccc
601  ccgcccgctc cgtccagacc gtctgcgtcc ccggccgaac caccgacccg
651  gcctgccccc caacactccc gacgtgcgcg ccggggtcac cgctatcgca
701  cagacaccga acgaaacgtc gggaaggtag caactggtcc atccatccag
751  gcgcggctgc gggcagagga agcatccggc gcgcagctcg cccccggaac
801  ggagccctcg ccagcgccgt tgggccaacc gagatcgtat ctggctccgc
851  ccacccgccc cgcgccgaca gaacctcccc ccagcccctc gccgcagcgc
901  aactccggtc ggcgtgccga gcgacgcgtc caccccgatt tagccgccca
951  acatgccgcg gcgcaacctg attcaattac ggccgcaacc actggcggtc
1001 gtcgccgcaa gcgtgcagcg ccggatctcg acgcgacaca gaaatcctta
1051 aggccggcgg ccaaggggcc gaaggtgaag aaggtgaagc cccagaaacc
1101 gaaggccacg aagccgccca aagtggtgtc gcagcgcggc tggcgacatt
1151 gggtgcatgc gttgacgcga atcaacctgg gcctgtcacc cgacgagaag
1201 tacgagctgg acctgcacgc tcgagtccgc cgcaatcccc gcgggtcgta
1251 tcagatcgcc gtcgtcggtc tcaaaggtgg ggctggcaaa accacgctga
1301 cagcagcgtt ggggtcgacg ttggctcagg tgcgggccga ccggatcctg
1351 gctctagacg cggatccagg cgccggaaac ctcgccgatc gggtagggcg
1401 acaatcgggc gcgaccatcg ctgatgtgct tgcagaaaaa gagctgtcgc
1451 actacaacga catccgcgca cacactagcg tcaatgcggt caatctggaa
1501 gtgctgccgg caccggaata cagctcggcg cagcgcgcgc tcagcgacgc
1551 cgactggcat ttcatcgccg atcctgcgtc gaggttttac aacctcgtct
1601 tggctgattg tggggccggc ttcttcgacc cgctgacccg cggcgtgctg
1651 tccacggtgt ccggtgtcgt ggtcgtggca agtgtctcaa tcgacggcgc
1701 acaacaggcg tcggtcgcgt tggactggtt gcgcaacaac ggttaccaag
1751 atttggcgag ccgcgcatgc gtggtcatca atcacatcat gccgggagaa
1801 cccaatgtcg cagttaaaga cctggtgcgg catttcgaac agcaagttca
1851 acccggccgg gtcgtggtca tgccgtggga caggcacatt gcggccggaa
1901 ccgagatttc actcgacttg ctcgacccta tctacaagcg caaggtcctc
1951 gaattggccg cagcgctatc cgacgatttc gagagggctg gacgtcgttg
2001 a
```

mtbn6

```
1    ttgagcgcac ctgctgttgc tgctggtcct accgccgcgg gggcaaccgc
51   tgcgcggcct gccaccaccc gggtgacgat cctgaccggc agacggatga
101  ccgatttggt actgccagcg gcggtgccga tggaaactta tattgacgac
151  accgtcgcgg tgctttccga ggtgttggaa gacacgccgg ctgatgtact
201  cggcggcttc gactttaccg cgcaaggcgt gtgggcgttc gctcgtcccg
251  gatcgccgcc gctgaagctc gaccagtcac tcgatgacgc cggggtggtc
301  gacgggtcac tgctgactct ggtgtcagtc agtcgcaccg agcgctaccg
351  accgttggtc gaggatgtca tcgacgcgat cgccgtgctt gacgagtcac
401  ctgagttcga ccgcacggca ttgaatcgct ttgtgggggc ggcgatcccg
451  cttttgaccg cgcccgtcat cgggatggcg atgcgggcgt ggtgggaaac
501  tgggcgtagc ttgtggtggc cgttggcgat tggcatcctg gggatcgctg
```

FIG. 2C

```
551  tgctggtagg cagcttcgtc gcgaacaggt tctaccagag cggccacctg
601  gccgagtgcc tactggtcac gacgtatctg ctgatcgcaa ccgccgcagc
651  gctggccgtg ccgttgccgc gcggggtcaa ctcgttgggg gcgccacaag
701  ttgccggcgc cgctacggcc gtgctgtttt tgaccttgat gacgcggggc
751  ggccctcgga agcgtcatga gttggcgtcg tttgccgtga tcaccgctat
801  cgcggtcatc gcggccgccg ctgccttcgg ctatggatac caggactggg
851  tccccgcggg ggggatcgca ttcgggctgt tcattgtgac gaatgcggcc
901  aagctgaccg tcgcggtcgc gcggatcgcg ctgccgccga ttccggtacc
951  cggcgaaacc gtggacaacg aggagttgct cgatcccgtc gcgaccccgg
1001 aggctaccag cgaagaaacc ccgacctggc aggccatcat cgcgtcggtg
1051 cccgcgtccg cggtccggct caccgagcgc agcaaactgg ccaagcaact
1101 tctgatcgga tacgtcacgt cgggcaccct gattctggct gccggtgcca
1151 tcgcggtcgt ggtgcgcggg cacttctttg tacacagcct ggtggtcgcg
1201 ggtttgatca cgaccgtctg cggatttcgc tcgcggcttt acgccgagcg
1251 ctggtgtgcg tgggcgttgc tggcggcgac ggtcgcgatt ccgacgggtc
1301 tgacggccaa actcatcatc tggtacccgc actatgcctg gctgttgttg
1351 agcgtctacc tcacggtagc cctggttgcg ctcgtggtgg tcgggtcgat
1401 ggctcacgtc cggcgcgttt caccggtcgt aaaacgaact ctggaattga
1451 tcgacggcgc catgatcgct gccatcattc ccatgctgct gtggatcacc
1501 ggggtgtacg acacggtccg caatatccgg ttctga
```

mtbn7

```
1    atggctgaac cgttggccgt cgatcccacc ggcttgagcg cagcggccgc
51   gaaattggcc ggcctcgttt ttccgcagcc tccggcgccg atcgcggtca
101  gcggaacgga ttcggtggta gcagcaatca acgagaccat gccaagcatc
151  gaatcgctgg tcagtgacgg gctgcccggc gtgaaagccg ccctgactcg
201  aacagcatcc aacatgaacg cggcggcgga cgtctatgcg aagaccgatc
251  agtcactggg aaccagtttg agccagtatg cattcggctc gtcgggcgaa
301  ggcctggctg gcgtcgcctc ggtcggtggt cagccaagtc aggctaccca
351  gctgctgagc acacccgtgt cacaggtcac gacccagctc ggcgagacgg
401  ccgctgagct ggcaccccgt gttgttgcga cggtgccgca actcgttcag
451  ctggctccgc acgccgttca gatgtcgcaa aacgcatccc ccatcgctca
501  gacgatcagt caaaccgccc aacaggccgc ccagagcgcg cagggcggca
551  gcggcccaat gcccgcacag cttgccagcg ctgaaaaacc ggccaccgag
601  caagcggagc cggtccacga agtgacaaac gacgatcagg gcgaccaggg
651  cgacgtgcag ccggccgagg tcgttgccgc ggcacgtgac gaaggcgccg
701  gcgcatcacc gggccagcag cccggcgggg gcgttcccgc gcaagccatg
751  gataccggag ccggtgcccg cccagcggcg agtccgctgg cggcccccgt
801  cgatccgtcg actccggcac cctcaacaac cacaacgttg tag
```

FIG. 2D

mtbn8

```
1    atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51   gggcggctgg gtggaagccg atgaagacac tttctatgac cgggcccagg
101  aatatagcca ggttttgcaa agggtcaccg atgtattgga cacctgccgc
151  cagcagaaag gccacgtctt cgaaggcggc ctatggtccg gcggcgccgc
201  caatgctgcc aacggcgccc tgggtgcaaa catcaatcaa ttgatgacgc
251  tgcaggatta tctcgccacg gtgattacct ggcacaggca tattgccggg
301  ttgattgagc aagctaaatc cgatatcggc aataatgtgg atggcgctca
351  acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401  gccataccgc catcaattca ttggtcacgg cgacgcatgg ggccaatgtc
451  agtctggtcg ccgagaccgc tgagcgggtg ctggaatcca agaattggaa
501  acctccgaag aacgcactcg aggatttgct tcagcagaag tcgccgccac
551  ccccagacgt gcctaccctg gtcgtgccat ccccgggcac accgggcaca
601  ccgggaaccc cgatcacccc gggaaccccg atcaccccgg gaaccccaat
651  cacacccatc ccgggagcgc cggtaactcc gatcacacca acgcccggca
701  ctcccgtcac gccggtgacc ccgggcaagc cggtcacccc ggtgaccccg
751  gtcaaaccgg gcacaccagg cgagccaacc ccgatcacgc cggtcacccc
801  cccggtcgcc ccggccacac cggcaacccc ggccacgccc gttaccccag
851  ctcccgctcc acacccgcag ccggctccgg caccggcgcc atcgcctggg
901  ccccagccgg ttacaccggc cactcccggt ccgtctggtc cagcaacacc
951  gggcacccca gggggcgagc cggcgccgca cgtcaaaccc gcggcgttgg
1001 cggagcaacc tggtgtgccg ggccagcatg cgggcggggg gacgcagtcg
1051 gggcctgccc atgcggacga atccgccgcg tcggtgacgc cggctgcggc
1101 gtccggtgtc ccgggcgcac gggcggcggc cgccgcgccg agcggtaccg
1151 ccgtgggagc gggcgcgcgt tcgagcgtgg gtacggccgc ggcctcgggc
1201 gcggggtcgc atgctgccac tgggcgggcg ccggtggcta cctcggacaa
1251 ggcggcggca ccgagcacgc gggcggcctc ggcgcggacg gcacctcctg
1301 cccgcccgcc gtcgaccgat cacatcgaca aacccgatcg cagcgagtct
1351 gcagatgacg gtacgccggt gtcgatgatc ccggtgtcgg cggctcgggc
1401 ggcacgcgac gccgccactg cagctgccag cgcccgccag cgtggccgcg
1451 gtgatgcgct gcggttggcg cgacgcatcg cggcggcgct caacgcgtcc
1501 gacaacaacg cgggcgacta cgggttcttc tggatcaccg cggtgaccac
1551 cgacggttcc atcgtcgtgg ccaacagcta tgggctggcc tacatacccg
1601 acgggatgga attgccgaat aaggtgtact tggccagcgc ggatcacgca
1651 atcccggttg acgaaattgc acgctgtgcc acctacccgg ttttggccgt
1701 gcaagcctgg gcggctttcc acgacatgac gctgcgggcg gtgatcggta
1751 ccgcggagca gttggccagt tcggatcccg gtgtggccaa gattgtgctg
1801 gagccagatg acattccgga gagcggcaaa atgacgggcc ggtcgcggct
1851 ggaggtcgtc gacccctcgg cggcggctca gctggccgac actaccgatc
1901 agcgtttgct cgacttgttg ccgccggcgc cggtggatgt caatccaccg
1951 ggcgatgagc ggcacatgct gtggttcgag ctgatgaagc ccatgaccag
2001 caccgctacc ggccgcgagg ccgctcatct gcgggcgttc cgggcctacg
2051 ctgcccactc acaggagatt gccctgcacc aagcgcacac tgcgactgac
2101 gcggccgtcc agcgtgtggc cgtcgcggac tggctgtact ggcaatacgt
2151 caccgggttg ctcgaccggg ccctggccgc cgcatgctga
```

FIG. 2E

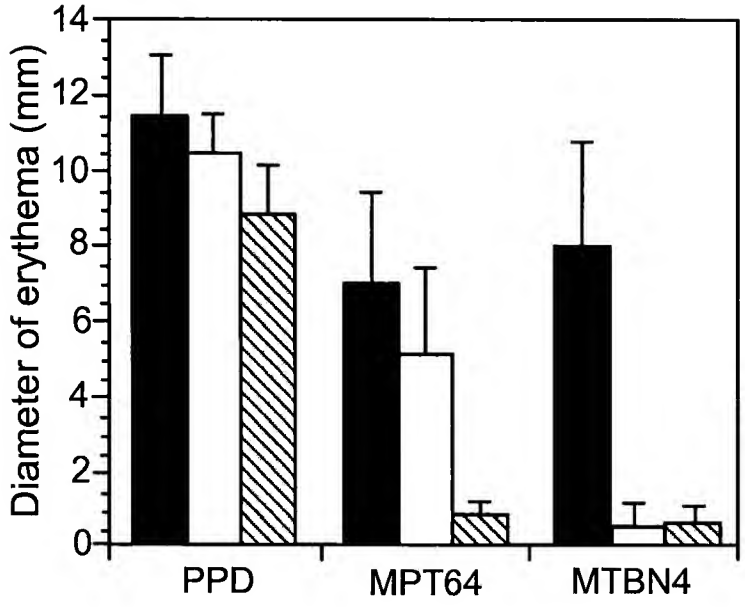

FIG. 3

~~FIG. 1~~

MTBN1

MTAEPEVRTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVWGVDVSGAGGNIGIGGAPQTGKSTLLQTMVMSAAATHSPRNVQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDKVNRVVAEMQAVMRQRETTFKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLIIDGWPGFVGEFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKIEFRLGDVNETQIDRITREIPANRPGRAVSMEKHHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEIPIGLRETDLT
PAHCHMHTNPHLLIFGAAKSGKTTIAHAIARAICARNSPQQVRFMLADYRSGLLDAVPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVVLLVDDWHM
IVGAAGGMPPMAPLAPLLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAFGSGAPTMFLS
GEKQEFPSSEFKVKRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2

MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSVTGLVPAGADEVSAQAATAFTSEGIQ
LLASNASAQDQLHRAGEAVQDVARTYSQIDDGAAGVFAE*

MTBN3

MLWHAMPPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTGGG
SDKALAAATPMVVWLQTASTQAKTRAMQATAQAAAYTQAMATTPSLPEIAANHITQAVLT
ATNFFGINTIPIALTEMDYFIRMWNQAALAMEVYQAETAVNTLFEKLEPMASILDPGASQ
STTNPIFGMPSPGSSTPVGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLFSQVGGTG
GGNPADEEAAQMGLLGTSPLSNHPLAGGSGPSAGAGLLRAESLPGAGGSLTRTPLMSQLI
EKPVAPSVMPAAAAGSSATGGAAPVGAGAMGQGAQSGGSTRPGLVAPAPLAQEREEDDED
DWDEEDDW*

MTBN4

MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVRFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5

MAADYDKLFRPHEGMEAPDDMAAQPFFDPSASFPPAPASANLPKPNGQTPPPTSDDLSER
FVSAPPPPPPPPPPPPPTPMPIAAGEPPSPEPAASKPPTPPMPIAGPEPAPPKPPTPPMP
IAGPEPAPPKPPTPPMPIAGPAPTPTESQLAPPRPPTPQTPTGAPQQPESPAPHVPSHGP
HQPRRTAPAPPWAKMPIGEPPPAPSRPSASPAEPPTRPAPQHSRRARRGHRYRTDTERNV
GKVATGPSIQARLRAEEASGAQLAPGTEPSPAPLGQPRSYLAPPTRPAPTEPPPSPSPQR
NSGRRAERRVHPDLAAQHAAAQPDSITAATTGGRRRKRAAPDLDATQKSLRPAAKGPKVK
KVKPQKPKATKPPKVVSQRGWRHWVHALTRINLGLSPDEKYELDLHARVRRNPRGSYQIA
VVGLKGGAGKTTLTAALGSTLAQVRADRILALDADPGAGNLADRVGRQSGATIADVLAEK
ELSHYNDIRAHTSVNAVNLEVLPAPEYSSAQRALSDADWHFIADPASRFYNLVLADCGAG
FFDPLTRGVLSTVSGVVVVASVSIDGAQQASVALDWLRNNGYQDLASRACVVINHIMPGE
PNVAVKDLVRHFEQQVQPGRVVVMPWDRHIAAGTEISLDLLDPIYKRKVLELAAALSDDF
ERAGRR*

FIG. 1A

~~FIG. 1 (continued)~~

MTBN6

LSAPAVAAGPTAAGATAARPATTRVTILTGRRMTDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFARPGSPPLKLDQSLDDAGVVDGSLLTLVSVSRTERYRPLV
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTAPVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGHLAECLLVTTYLLIATAAALAVPLPRGVNSLGAPQVAGAATA
VLFLTLMTRGGPRKRHELASFAVITAIAVIAAAAAFGYGYQDWVPAGGIAFGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAIIASVPASAVRLTER
SKLAKQLLIGYVTSGTLILAAGAIAVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLIIWYPHYAWLLLSVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAIIPMLLWITGVYDTVRNIRF*

MTBN7

MAEPLAVDPTGLSAAAAKLAGLVFPQPPAPIAVSGTDSVVAAINETMPSIESLVSDGLPG
VKAALTRTASNMNAAADVYAKTDQSLGTSLSQYAFGSSGEGLAGVASVGGQPSQATQLLS
TPVSQVTTQLGETAAELAPRVVATVPQLVQLAPHAVQMSQNASPIAQTISQTAQQAAQSA
QGGSGPMPAQLASAEKPATEQAEPVHEVTNDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTTL*

MTBN8

MSITRPTGSYARQMLDPGGWVEADEDTFYDRAQEYSQVLQRVTDVLDTCRQQKGHVFEGG
LWSGGAANAANGALGANINQLMTLQDYLATVITWHRHIAGLIEQAKSDIGNNVDGAQREI
DILENDPSLDADERHTAINSLVTATHGANVSLVAETAERVLESKNWKPPKNALEDLLQQK
SPPPPDVPTLVVPSPGTPGTPGTPITPGTPITPGTPITPIPGAPVTPITPTPGTPVTPVT
PGKPVTPVTPVKPGTPGEPTPITPVTPPVAPATPATPATPVTPAPAPHPQPAPAPAPSPG
PQPVTPATPGPSGPATPGTPGGEPAPHVKPAALAEQPGVPGQHAGGGTQSGPAHADESAA
SVTPAAASGVPGARAAAAAPSGTAVGAGARSSVGTAAASGAGSHAATGRAPVATSDKAAA
PSTRAASARTAPPARPPSTDHIDKPDRSESADDGTPVSMIPVSAARAARDAATAAASARQ
RGRGDALRLARRIAAALNASDNNAGDYGFFWITAVTTDGSIVVANSYGLAYIPDGMELPN
KVYLASADHAIPVDEIARCATYPVLAVQAWAAFHDMTLRAVIGTAEQLASSDPGVAKIVL
EPDDIPESGKMTGRSRLEVVDPSAAAQLADTTDQRLLDLLPPAPVDVNPPGDERHMLWFE
LMKPMTSTATGREAAHLRAFRAYAAHSQEIALHQAHTATDAAVQRVAVADWLYWQYVTGL
LDRALAAAC*

FIG. 1B

~~FIG. 2~~

mtbn1

```
1     atgactgctg aaccggaagt acggacgctg cgcgaggttg tgctggacca
51    gctcggcact gctgaatcgc gtgcgtacaa gatgtggctg ccgccgttga
101   ccaatccggt cccgctcaac gagctcatcg cccgtgatcg gcgacaaccc
151   ctgcgatttg ccctggggat catggatgaa ccgcgccgcc atctacagga
201   tgtgtggggc gtagacgttt ccggggccgg cggcaacatc ggtattgggg
251   gcgcacctca aaccgggaag tcgacgctac tgcagacgat ggtgatgtcg
301   gccgccgcca cacactcacc gcgcaacgtt cagttctatt gcatcgacct
351   aggtggcggc gggctgatct atctcgaaaa ccttccacac gtcggtgggg
401   tagccaatcg gtccgagccc gacaaggtca accgggtggt cgcagagatg
451   caagccgtca tgcggcaacg ggaaaccacc ttcaaggaac accgagtggg
501   ctcgatcggg atgtaccggc agctgcgtga cgatccaagt caacccgttg
551   cgtccgatcc atacggcgac gtctttctga tcatcgacgg atggcccggt
601   tttgtcggcg agttccccga ccttgagggg caggttcaag atctggccgc
651   ccaggggctg gcgttcggcg tccacgtcat catctccacg ccacgctgga
701   cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
751   cggcttggtg acgtcaatga aacccagatc gaccggatta cccgcgagat
801   cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatctga
851   tgatcggcgt gcccaggttc gacggcgtgc acagcgccga taacctggtg
901   gaggcgatca ccgcgggggt gacgcagatc gcttcccagc acaccgaaca
951   ggcacctccg gtgcgggtcc tgccggagcg tatccacctg cacgaactcg
1001  acccgaaccc gccgggacca gagtccgact accgcactcg ctgggagatt
1051  ccgatcggct tgcgcgagac ggacctgacg ccggctcact gccacatgca
1101  cacgaacccg cacctactga tcttcggtgc ggccaaatcg ggcaagacga
1151  ccattgccca cgcgatcgcg cgcgccattt gtgcccgaaa cagtccccag
1201  caggtgcggt tcatgctcgc ggactaccgc tcgggcctgc tggacgcggt
1251  gccggacacc catctgctgg gcgccggcgc gatcaaccgc aacagcgcgt
1301  cgctagacga ggccgttcaa gcactggcgg tcaacctgaa gaagcggttg
1351  ccgccgaccg acctgacgac ggcgcagcta cgctcgcgtt cgtggtggag
1401  cggatttgac gtcgtgcttc tggtcgacga ttggcacatg atcgtgggtg
1451  ccgccggggg gatgccgccg atggcaccgc tggccccgtt attgccggcg
1501  gcggcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
1551  ttacaaggca accatggaca agttcgtcgg cgccgcattc gggtcgggcg
1601  ctccgacaat gttcctttcg ggcgagaagc aggaattccc atccagtgag
1651  ttcaaggtca agcggcgccc ccctggccag gcatttctcg tctcgccaga
1701  cggcaaagag gtcatccagg ccccctacat cgagcctcca gaagaagtgt
1751  tcgcagcacc cccaagcgcc ggttaa
```

mtbn2

```
1     atggaaaaaa tgtcacatga tccgatcgct gccgacattg gcacgcaagt
51    gagcgacaac gctctgcacg gcgtgacggc cggctcgacg gcgctgacgt
101   cggtgaccgg gctggttccc gcgggggccg atgaggtctc cgcccaagcg
151   gcgacggcgt tcacatcgga gggcatccaa ttgctggctt ccaatgcatc
201   ggcccaagac cagctccacc gtgcgggcga agcggtccag gacgtcgccc
251   gcacctattc gcaaatcgac gacggcgccg ccggcgtctt cgcctaatag
```

mtbn3

```
1     atgctgtggc acgcaatgcc accggagcta aataccgcac ggctgatggc
51    cggcgcgggt ccggctccaa tgcttgcggc ggccgcggga tggcagacgc
101   tttcggcggc tctggacgct caggccgtcg agttgaccgc gcgcctgaac
```

FIG. 2A

~~FIG. 2 (continued)~~

```
151  tctctgggag aagcctggac tggaggtggc agcgacaagg cgcttgcggc
201  tgcaacgccg atggtggtct ggctacaaac cgcgtcaaca caggccaaga
251  cccgtgcgat gcaggcgacg gcgcaagccg cggcatacac ccaggccatg
301  gccacgacgc cgtcgctgcc ggagatcgcc gccaaccaca tcacccaggc
351  cgtccttacg gccaccaact tcttcggtat caacacgatc ccgatcgcgt
401  tgaccgagat ggattatttc atccgtatgt ggaaccaggc agccctggca
451  atggaggtct accaggccga gaccgcggtt aacacgcttt tcgagaagct
501  cgagccgatg gcgtcgatcc ttgatcccgg cgcgagccag agcacgacga
551  acccgatctt cggaatgccc tcccctggca gctcaacacc ggttggccag
601  ttgccgccgg cggctaccca gaccctcggc caactgggtg agatgagcgg
651  cccgatgcag cagctgaccc agccgctgca gcaggtgacg tcgttgttca
701  gccaggtggg cggcaccggc ggcggcaacc cagccgacga ggaagccgcg
751  cagatgggcc tgctcggcac cagtccgctg tcgaaccatc cgctggctgg
801  tggatcaggc cccagcgcgg gcgcgggcct gctgcgcgcg gagtcgctac
851  ctggcgcagg tgggtcgttg acccgcacgc cgctgatgtc tcagctgatc
901  gaaaagccgg ttgccccctc ggtgatgccg gcggctgctg ccggatcgtc
951  ggcgacgggt ggcgccgctc cggtgggtgc gggagcgatg ggccagggtg
1001 cgcaatccgg cggctccacc aggccgggtc tggtcgcgcc ggcaccgctc
1051 gcgcaggagc gtgaagaaga cgacgaggac gactgggacg aagaggacga
1101 ctggtga
```

mtbn4

```
1    atggcagaga tgaagaccga tgccgctacc ctcgcgcagg aggcaggtaa
51   tttcgagcgg atctccggcg acctgaaaac ccagatcgac caggtggagt
101  cgacggcagg ttcgttgcag ggccagtggc gcggcgcggc ggggacggcc
151  gcccaggccg cggtggtgcg cttccaagaa gcagccaata agcagaagca
201  ggaactcgac gagatctcga cgaatattcg tcaggccggc gtccaatact
251  cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc
301  tga
```

mtbn5

```
1    atggcggccg actacgacaa gctcttccgg ccgcacgaag gtatggaagc
51   tccggacgat atggcagcgc agccgttctt cgaccccagt gcttcgtttc
101  cgccggcgcc cgcatcggca aacctaccga agcccaacgg ccagactccg
151  cccccgacgt ccgacgacct gtcggagcgg ttcgtgtcgg ccccgccgcc
201  gccacccccа cccccacctc cgcctccgcc aactccgatg ccgatcgccg
251  caggagagcc gccctcgccg gaaccggccg catctaaacc acccacaccc
301  cccatgccca tcgccggacc cgaaccggcc ccacccaaac cacccacacc
351  ccccatgccc atcgccggac ccgaaccggc cccacccaaa ccacccacac
401  ctccgatgcc catcgccgga cctgcaccca ccccaaccga atcccagttg
451  gcgcccccca gaccaccgac accacaaacg ccaaccggag cgccgcagca
501  accggaatca ccggcgcccc acgtaccctc gcacgggcca catcaacccc
551  ggcgcaccgc accagcaccg ccctgggcaa agatgccaat cggcgaaccc
601  ccgcccgctc cgtccagacc gtctgcgtcc ccggccgaac caccgacccg
651  gcctgccccc caacactccc gacgtgcgcg ccggggtcac cgctatcgca
701  cagacaccga acgaaacgtc gggaaggtag caactggtcc atccatccag
751  gcgcggctgc gggcagagga agcatccggc gcgcagctcg cccccggaac
801  ggagccctcg ccagcgccgt tgggccaacc gagatcgtat ctggctccgc
851  ccacccgccc cgcgccgaca gaacctcccc ccagcccctc gccgcagcgc
901  aactccggtc ggcgtgccga gcgacgcgtc caccccgatt tagccgccca
```

FIG 2B

FIG. 2 (continued)

```
951  acatgccgcg gcgcaacctg attcaattac ggccgcaacc actggcggtc
1001 gtcgccgcaa gcgtgcagcg ccggatctcg acgcgacaca gaaatcctta
1051 aggccggcgg ccaaggggcc gaaggtgaag aaggtgaagc cccagaaacc
1101 gaaggccacg aagccgccca aagtggtgtc gcagcgcggc tggcgacatt
1151 gggtgcatgc gttgacgcga atcaacctgg gcctgtcacc cgacgagaag
1201 tacgagctgg acctgcacgc tcgagtccgc cgcaatcccc gcgggtcgta
1251 tcagatcgcc gtcgtcggtc tcaaaggtgg ggctggcaaa accacgctga
1301 cagcagcgtt ggggtcgacg ttggctcagg tgcgggccga ccggatcctg
1351 gctctagacg cggatccagg cgccggaaac ctcgccgatc gggtagggcg
1401 acaatcgggc gcgaccatcg ctgatgtgct tgcagaaaaa gagctgtcgc
1451 actacaacga catccgcgca cacactagcg tcaatgcggt caatctggaa
1501 gtgctgccgg caccggaata cagctcggcg cagcgcgcgc tcagcgacgc
1551 cgactggcat ttcatcgccg atcctgcgtc gaggttttac aacctcgtct
1601 tggctgattg tggggccggc ttcttcgacc cgctgacccg cggcgtgctg
1651 tccacggtgt ccggtgtcgt ggtcgtggca agtgtctcaa tcgacggcgc
1701 acaacaggcg tcggtcgcgt tggactggtt gcgcaacaac ggttaccaag
1751 atttggcgag ccgcgcatgc gtggtcatca atcacatcat gccgggagaa
1801 cccaatgtcg cagttaaaga cctggtgcgg catttcgaac agcaagttca
1851 acccggccgg gtcgtggtca tgccgtggga caggcacatt gcggccggaa
1901 ccgagatttc actcgacttg ctcgacccta tctacaagcg caaggtcctc
1951 gaattggccg cagcgctatc cgacgatttc gagagggctg gacgtcgttg
2001 a
```

mtbn6

```
1    ttgagcgcac ctgctgttgc tgctggtcct accgccgcgg gggcaaccgc
51   tgcgcggcct gccaccaccc gggtgacgat cctgaccggc agacggatga
101  ccgatttggt actgccagcg gcggtgccga tggaaactta tattgacgac
151  accgtcgcgg tgctttccga ggtgttggaa gacacgccgg ctgatgtact
201  cggcggcttc gactttaccg cgcaaggcgt gtgggcgttc gctcgtcccg
251  gatcgccgcc gctgaagctc gaccagtcac tcgatgacgc cggggtggtc
301  gacgggtcac tgctgactct ggtgtcagtc agtcgcaccg agcgctaccg
351  accgttggtc gaggatgtca tcgacgcgat cgccgtgctt gacgagtcac
401  ctgagttcga ccgcacggca ttgaatcgct ttgtgggggc ggcgatcccg
451  cttttgaccg cgcccgtcat cgggatggcg atgcgggcgt ggtgggaaac
501  tgggcgtagc ttgtggtggc cgttggcgat tggcatcctg gggatcgctg
551  tgctggtagg cagcttcgtc gcgaacaggt tctaccagag cggccacctg
601  gccgagtgcc tactggtcac gacgtatctg ctgatcgcaa ccgccgcagc
651  gctggccgtg ccgttgccgc gcggggtcaa ctcgttgggg gcgccacaag
701  ttgccggcgc cgctacggcc gtgctgtttt tgaccttgat gacgcggggc
751  ggccctcgga agcgtcatga gttggcgtcg tttgccgtga tcaccgctat
801  cgcggtcatc gcggccgccg ctgccttcgg ctatggatac caggactggg
851  tccccgcggg ggggatcgca ttcgggctgt tcattgtgac gaatgcggcc
901  aagctgaccg tcgcggtcgc gcggatcgcg ctgccgccga ttccggtacc
951  cggcgaaacc gtggacaacg aggagttgct cgatcccgtc gcgaccccgg
1001 aggctaccag cgaagaaacc ccgacctggc aggccatcat cgcgtcggtg
1051 cccgcgtccg cggtccggct caccgagcgc agcaaactgg ccaagcaact
1101 tctgatcgga tacgtcacgt cgggcaccct gattctggct gccggtgcca
1151 tcgcggtcgt ggtgcgcggg cacttctttg tacacagcct ggtggtcgcg
1201 ggtttgatca cgaccgtctg cggatttcgc tcgcggcttt acgccgagcg
1251 ctggtgtgcg tgggcgttgc tggcggcgac ggtcgcgatt ccgacgggtc
1301 tgacggccaa actcatcatc tggtacccgc actatgcctg gctgttgttg
```

FIG. 2C

~~FIG. 2 (continued)~~

```
1351 agcgtctacc tcacggtagc cctggttgcg ctcgtggtgg tcgggtcgat
1401 ggctcacgtc cggcgcgttt caccggtcgt aaaacgaact ctggaattga
1451 tcgacggcgc catgatcgct gccatcattc ccatgctgct gtggatcacc
1501 ggggtgtacg acacggtccg caatatccgg ttctga
```

mtbn7

```
1    atggctgaac cgttggccgt cgatcccacc ggcttgagcg cagcggccgc
51   gaaattggcc ggcctcgttt ttccgcagcc tccggcgccg atcgcggtca
101  gcggaacgga ttcggtggta gcagcaatca acgagaccat gccaagcatc
151  gaatcgctgg tcagtgacgg gctgcccggc gtgaaagccg ccctgactcg
201  aacagcatcc aacatgaacg cggcggcgga cgtctatgcg aagaccgatc
251  agtcactggg aaccagtttg agccagtatg cattcggctc gtcgggcgaa
301  ggcctggctg gcgtcgcctc ggtcggtggt cagccaagtc aggctaccca
351  gctgctgagc acacccgtgt cacaggtcac gacccagctc ggcgagacgg
401  ccgctgagct ggcaccccgt gttgttgcga cggtgccgca actcgttcag
451  ctggctccgc acgccgttca gatgtcgcaa aacgcatccc ccatcgctca
501  gacgatcagt caaaccgccc aacaggccgc ccagagcgcg cagggcggca
551  gcggcccaat gcccgcacag cttgccagcg ctgaaaaacc ggccaccgag
601  caagcggagc cggtccacga agtgacaaac gacgatcagg gcgaccaggg
651  cgacgtgcag ccggccgagg tcgttgccgc ggcacgtgac gaaggcgccg
701  gcgcatcacc gggccagcag cccggcgggg gcgttcccgc gcaagccatg
751  gataccggag ccggtgcccg cccagcggcg agtccgctgg cggcccccgt
801  cgatccgtcg actccggcac cctcaacaac cacaacgttg tag
```

mtbn8

```
1    atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51   gggcggctgg gtggaagccg atgaagacac tttctatgac cgggcccagg
101  aatatagcca ggttttgcaa agggtcaccg atgtattgga cacctgccgc
151  cagcagaaag gccacgtctt cgaaggcggc ctatggtccg gcggcgccgc
201  caatgctgcc aacggcgccc tgggtgcaaa catcaatcaa ttgatgacgc
251  tgcaggatta tctcgccacg gtgattacct ggcacaggca tattgccggg
301  ttgattgagc aagctaaatc cgatatcggc aataatgtgg atggcgctca
351  acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401  gccataccgc catcaattca ttggtcacgg cgacgcatgg ggccaatgtc
451  agtctggtcg ccgagaccgc tgagcgggtg ctggaatcca agaattggaa
501  acctccgaag aacgcactcg aggatttgct tcagcagaag tcgccgccac
551  ccccagacgt gcctaccctg gtcgtgccat ccccgggcac accgggcaca
601  ccgggaaccc cgatcacccc gggaaccccg atcaccccgg gaaccccaat
651  cacacccatc ccgggagcgc cggtaactcc gatcacacca acgcccggca
701  ctcccgtcac gccggtgacc ccgggcaagc cggtcacccc ggtgaccccg
751  gtcaaaccgg gcacaccagg cgagccaacc ccgatcacgc cggtcacccc
801  cccggtcgcc ccggccacac cggcaacccc ggccacgccc gttaccccag
851  ctcccgctcc acacccgcag ccggctccgg caccggcgcc atcgcctggg
901  ccccagccgg ttacaccggc cactcccggt ccgtctggtc cagcaacacc
951  gggcacccca gggggcgagc cggcgccgca cgtcaaaccc gcggcgttgg
1001 cggagcaacc tggtgtgccg ggccagcatg cgggcggggg gacgcagtcg
1051 gggcctgccc atgcggacga atccgccgcg tcggtgacgc cggctgcggc
1101 gtccggtgtc ccgggcgcac gggcggcggc cgccgcgccg agcggtaccg
1151 ccgtgggagc gggcgcgcgt tcgagcgtgg gtacggccgc ggcctcgggc
1201 gcggggtcgc atgctgccac tgggcgggcg ccggtggcta cctcggacaa
```

FIG. 2D

~~FIG. 2 (continued)~~

```
1251 ggcggcggca ccgagcacgc gggcggcctc ggcgcggacg gcacctcctg
1301 cccgcccgcc gtcgaccgat cacatcgaca aacccgatcg cagcgagtct
1351 gcagatgacg gtacgccggt gtcgatgatc ccggtgtcgg cggctcgggc
1401 ggcacgcgac gccgccactg cagctgccag cgcccgccag cgtggccgcg
1451 gtgatgcgct gcggttggcg cgacgcatcg cggcggcgct caacgcgtcc
1501 gacaacaacg cgggcgacta cgggttcttc tggatcaccg cggtgaccac
1551 cgacggttcc atcgtcgtgg ccaacagcta tgggctggcc tacatacccg
1601 acgggatgga attgccgaat aaggtgtact tggccagcgc ggatcacgca
1651 atcccggttg acgaaattgc acgctgtgcc acctacccgg ttttggccgt
1701 gcaagcctgg gcggctttcc acgacatgac gctgcgggcg gtgatcggta
1751 ccgcggagca gttggccagt tcggatcccg gtgtggccaa gattgtgctg
1801 gagccagatg acattccgga gagcggcaaa atgacgggcc ggtcgcggct
1851 ggaggtcgtc gacccctcgg cggcggctca gctggccgac actaccgatc
1901 agcgtttgct cgacttgttg ccgccggcgc cggtggatgt caatccaccg
1951 ggcgatgagc ggcacatgct gtggttcgag ctgatgaagc ccatgaccag
2001 caccgctacc ggccgcgagg ccgctcatct gcgggcgttc cgggcctacg
2051 ctgcccactc acaggagatt gccctgcacc aagcgcacac tgcgactgac
2101 gcggccgtcc agcgtgtggc cgtcgcggac tggctgtact ggcaatacgt
2151 caccgggttg ctcgaccggg ccctggccgc cgcatgctga
```

FIG. 2E

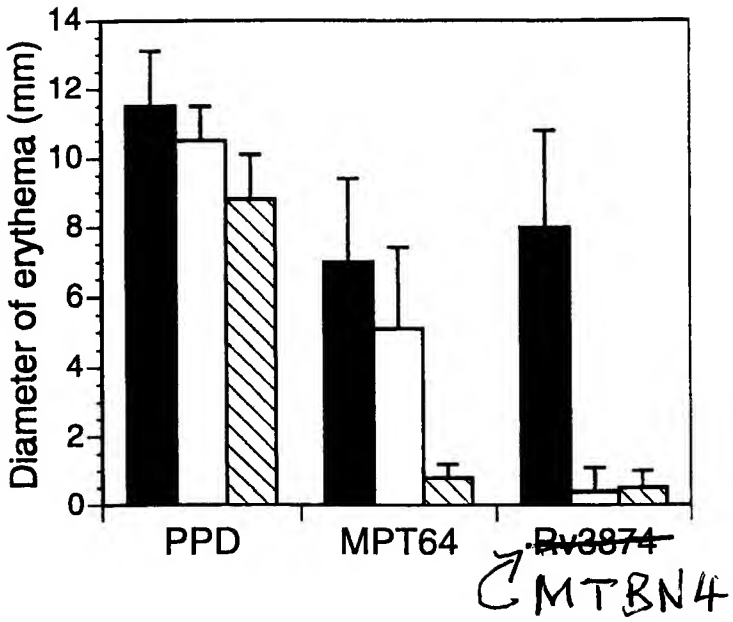
Diameter of erythema (mm)
14
12
10
8
6
4
2
0
PPD
MPT64
~~Rv3874~~
MTBN4

FIG 3